

Response Under 37 C.F.R. § 1.116
Serial No. 09/732,788
Our Ref: Q62242

Examiner has introduced a new ground of rejection which was not necessitated by Applicant's Amendment. Accordingly, Applicant respectfully submits that the final rejection is improper.

In addition, Applicant maintains that claims 1 and 2 are patentable over the prior art for the following reasons. The invention recited in claims 1 and 2 is directed to an apparatus for waterproofing a terminal connecting portion of a sheathed wire in which a terminal fitting 20 and a bared conductor 11 of the sheath wire are connected with each other. *See*, the preamble of claim 1. According to the invention, the upper mold has a dome-like ceiling face which defines an upper part of the mold cavity in which the terminal connecting portion of the sheathed wire is accommodated. The prior art does not teach or suggest this arrangement.

The Examiner again acknowledges that the admitted prior art fails to disclose an upper mold having an inner space with a dome-like shape, as claim 1 requires. Nonetheless, the Examiner contends that *Saito* compensates for this deficiency. More specifically, the Examiner states as follows:

Saito discloses a mold for molding a wire-proof cable comprising an upper mold and a lower mold (col. 3, lines 8-16), wherein the molds have a dome-like shape formed with curvatures (15, 17).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the admitted prior art by providing a dome-shaped upper mold, which has curvatures as taught by Saito, because the curvature of the upper mold would form a product that has a rounded shape.

Applicant maintains that the Examiner's obviousness combination is unsupported by the prior art. First, *Saito* is directed to mold which is quite different from that of the present

Response Under 37 C.F.R. § 1.116
Serial No. 09/732,788
Our Ref: Q62242

invention or from the admitted prior art. More specifically, the mold disclosed in *Saito* is not used to waterproof the terminal connecting portion of a sheathed wire in which a terminal fitting and a bared conductor are connected to each other, as in the present invention. Rather, *Saito* is directed to a mold for forming a packing material in spaces between a collection of wires having a generally round cross-section. The invention in *Saito* is directed to providing ridges 15 and 17 (which the Examiner refers to as curvatures) in the inside of the lower mold to raise the wires off of the lower surface such that the packing materials can sufficiently spread. *See*, column 2, lines 27-44. Naturally, the ridges have a round shape to conform to the shape of the wires.

Applicant respectfully submits that a person of ordinary skill in the art would not have found it obvious to modify the upper mold of the admitted prior art arrangement based on the teachings of *Saito*. This is because *Saito* is directed to a completely different type of molding apparatus than that of the admitted prior art and of the invention, as explained above. In short, the mold used in *Saito* is not designed to receive a terminal fitting as in the admitted prior art for surrounding the fitting with a waterproof material.

The weakness of the Examiner's rejection can best be appreciated by reviewing the Examiner's obviousness determination. More specifically, as noted above, the Examiner contends that it would have been obvious to one of ordinary skill in the art to modify the admitted prior art by providing a dome-shaped upper mold which has curvatures as taught by *Saito* "because the curvature of the upper mold would form a product that has a rounded shape." The problem with this rejection is that the prior art does not teach the desirability of forming an

Response Under 37 C.F.R. § 1.116
Serial No. 09/732,788
Our Ref: Q62242

upper mold of the admitted prior art to have a rounded shape. More specifically, although the Examiner contends that the curvature of the upper mold of *Saito* would form a product that has a rounded shape, there is no explanation as to why a person of ordinary skill in the art would have wanted the product of the admitted prior art to have a rounded shape. As pointed out above, the product produced by the admitted prior art device is completely unrelated to the product in *Saito* - the former is intended to encapsulate a metal connector with a waterproof material whereas the latter is intended to surround a plurality of wires with a waterproof material. (There is no metal terminal in the *Saito* product.) This difference is important because the cable disclosed in *Saito* has a generally round cross-section making it logical to design the mold so that it has a curved process. However, as shown in Figures 4A and 4B of the subject application, the admitted prior art the terminal is substantially rectangular making it logical to design the mold to have a rectangular cross-section, which is disclosed in the admitted prior art.

In view of the foregoing, it is respectfully submitted that the Examiner's obviousness determination is again unsupported based on the objective teachings of the prior art. The Examiner has merely located a reference (*Saito*) which discloses a mold having a curved cross-section and asserted that the invention would have been obvious without providing a cogent explanation in support of this obviousness determination. It is certainly true that modifying the upper mold of the admitted prior art to include a curvature would provide a product having a rounded shape, but the Examiner has failed to explain why such is desirable, based on the objective teachings of the prior art.

Response Under 37 C.F.R. § 1.116
Serial No. 09/732,788
Our Ref: Q62242

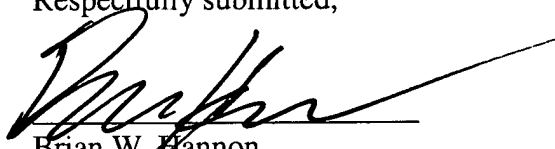
The Examiner also states that “Applicants should be noticed that there is no invention in merely changing the shape or form of an article without changing its function except in a design patent.” (emphasis added) However, as described throughout the specification, the inventive feature does change the function in that it allows the resulting molded resin to be smoothly released from the upper mold, as shown in Figure 2b. Thus, this statement by the Examiner ignores the important functional advantage associated with the present invention.

In view of the foregoing, it is submitted that all claims pending in the application are allowable. It is therefore requested that the application be passed to issue at the earliest possible convenience. **The Examiner is respectfully requested to contact the undersigned attorney, if any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.**

Response Under 37 C.F.R. § 1.116
Serial No. 09/732,788
Our Ref: Q62242

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Brian W. Hannon
Registration No. 32,778

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, D.C. 20037-3213
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Date: March 3, 2003